

ABSTRACT

This invention relates to a dual band antenna having a novel shape, which enables miniaturization and bandwidth widening. The antenna includes a dielectric substrate for an antenna including a layer of a planar element having a side edge portion constituted by either one of a curved line and line segments which are connected to each other while their inclinations are changed stepwise, and a substrate on which the dielectric substrate is placed and a ground pattern having a tapered shape with respect to the dielectric substrate is formed. The dielectric substrate and the ground pattern are juxtaposed, and a distance between the ground pattern and the side edge portion is continuously increased to become saturated as a point on the side edge portion moves away from a straight line passing through a feed position of the planar element. A resonant element is connected to the planar element at an end point of the planar element on the straight line passing through the feed position. By providing the resonant element, the dual band antenna can be realized. Besides, by the above structure, miniaturization of the antenna and bandwidth widening can be realized.